

Abstract

A system is provided for the collection of measurements for use by a surface profiling processing scheme. A movable platform has means mounted thereon for: (i) generating a measurement of inclination of a surface where the movable platform is positioned and stationary thereon, (ii) generating measurements of curvature of the surface as the movable platform traverses the surface, (iii) monitoring distance that the movable platform traverses during a measurement run on the surface where a measurement run is defined by starting and stopping positions on the surface that are spaced apart from one another, (iv) generating a signal each time the movable platform traverses a predetermined amount of distance during a measurement run where the signal so-generated serves as an indication to stop the movable platform during the measurement run, (v) collecting measurements of curvature while the movable platform traverses the surface during the measurement run, and (vi) collecting measurement of inclination at the starting position, stopping position, and each time the movable platform is stopped during the measurement run.